AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

1. (**Currently Amended**) A method for treating an implant surface intended for implantation into bone tissue, ~~c h a r a c t e r i s e d in~~ said method comprising:

providing a microroughness onto said implant surface by treating the metallic implant surface with an aqueous solution of hydrofluoric acid;

wherein said microroughness ~~comprising~~ comprises pores and peaks having a pore diameter of ≤ 1 μm, a pore depth of ≤ 500 nm, and a peak width, at half the pore depth, of from 15 to 150% of the pore diameter, and

the implant surface is a metallic implant surface.

2. (**Currently Amended**) [[A]] The method according to claim 1, wherein the pore diameter is within the range of 50 nm to 1 μm and the pore depth is within the range of 50 to 500 nm.

3. (**Currently Amended**) [[A]] The method according to claim 1 or 2, wherein a root-mean-square roughness (R_q and/or S_q) of ≤ 250 nm is provided.

4-5. (**Cancelled**)

6. (**Currently Amended**) **[[**A**]]** The method according to claim **[[**5,**]]** 1 or 2, wherein the concentration of the hydrofluoric acid is less than 0.5 M.

7. (**Currently Amended**) **[[**A**]]** The method according to claim **[[**6,**]]** 1 or 2, wherein the metallic implant surface is treated for an etching period of up to 180 sec at room temperature.

8. (**Currently Amended**) **[[**A**]]** The method according to claim 7, wherein the concentration of the hydrofluoric acid is 0.1 M and the etching period is up to 60 sec at room temperature.

9. (**Currently Amended**) **[[**A**]]** The method according to claim 1 or 2, further comprising providing a macroroughness on the implant surface prior to providing the microroughness.

10. (**Currently Amended**) **[[**A**]]** The method according to claim 9, wherein the macroroughness is provided by blasting the implant surface.

11. (**Currently Amended**) **[[**A**]]** The method according to claim 1 or 2, wherein said metallic implant surface is made of commercially pure titanium or an alloy of titanium.

12. (**Cancelled**)

13. (**Currently Amended**) An implant for implantation into bone tissue having an implant surface ~~characterised~~ characterized in that at least a part of the implant surface comprises a microroughness which comprise pores and peaks having a pore diameter of ≤ 1 μm, a pore depth of ≤ 500 nm, and a peak width, at half the pore depth, of from 15 to 150% of the pore diameter.

14. (**Currently Amended**) **[[**An**]]** The implant according to claim 13, wherein the pore diameter is within the range of 50 nm to 1 μm and the pore depth is within the range of 50 to 500 nm.

15. (**Currently Amended**) **[[**An**]]** The implant according to claim 13 or 14, wherein the microroughness has a root-mean-square roughness (R_q and/or S_q) of ≤ 250 nm.

16. (**Currently Amended**) **[[**An**]]** The implant according to claim 13 or 14, wherein the implant surface further comprises a macro-roughness.

17. (**Currently Amended**) **[[**An**]]** The implant according to claim 13 or 14, wherein said implant is a metallic implant.

18. (**Currently Amended**) **[[**An**]]** The implant according to claim 17, wherein said metallic implant is made of commercially pure titanium or an alloy of titanium.

19. (**Currently Amended**) **[[An]]** The implant according to claim 13 or 14, wherein the implant is a dental implant.

20. (**Currently Amended**) **[[An]]** The implant according to claim 13 or 14, wherein the implant is an orthopaedic implant.